

REMARKS

Claims 8 through 13 are pending in the present application.

Claims 8 to 13 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Action questions whether the apparatus in the first lines of claim 8 are being positively claimed. Claim 8 has been amended to positively claim the first lines of claim 8. Claim 8 is not in condition for allowance.

Claims 8 to 13 were rejected by the Action under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,409,644 to Van Haag (hereinafter "Van Haag") in view of U.S. Patent 4,821,384 to Arav (hereinafter "Arav"). Neither Van Haag nor Arav, taken either alone or in combination, teach the invention as set forth in claim 8. Independent claim 8 is directed to a regulator element (25), which is fitted in connection with a second end of the valve stem (22) as well as in connection with a feed line (P) for a hydraulic pressure fluid, and that the first slide (23) is subjectable to a hydrostatic control pressure consistent with a hydrostatic pressure acting on hydrostatic slide bearing elements (5a, 5a', 5b, 5b') which work against the spring (26) and act on a roll shell (2) in a plane co-directional with a primary loading (F) for operating the valve stem (22) and the regulator element (25) in such a way- that the hydraulic pressure fluid has access from the feed line (P) into the larger cylindrical space (21b, 21c) of the valve (20) in view of regulating a supply pressure delivered to at least one lateral bearing element (4a, 4a', 4b, 4b').

As discussed in the specification of the present application, a problem exists in the art in that the heavy bearing loads caused by hydrostatic pressure of main bearing elements cause a roll shell to turn in an elliptical manner due to the action of loading elements (see page 2, lines 14 to 20). The roll of claim 8 has a regulator having a feedback connection from the main bearing elements 5a, 5a', 5b, 5b', which allows

adjustments for a volume flow of hydraulic fluid and, thus, for the hydrostatic pressure of lateral bearing elements 4a, 4a', 4b, 4b'. Thus, in the present invention, as described in claim 8, the operation of the regulators for adjusting the hydrostatic pressure of the lateral bearing elements is dependent on the hydrostatic pressure of the main bearing elements, thereby relieving the problem caused by heavy bearing loads.

Van Haag fails to disclose a regulator element (25), which is fitted in connection with a second end of the valve stem (22) as well as in connection with a feed line (P) for a hydraulic pressure fluid, and that the first slide (23) is subjectable to a hydrostatic control pressure consistent with a hydrostatic pressure acting on hydrostatic slide bearing elements (5a, 5a', 5b, 5b') which work against the spring (26) and act on a roll shell (2) in a plane co-directional with a primary loading (F) for operating the valve stem (22) and the regulator element (25) in such a way- that the hydraulic pressure fluid has access from the feed line (P) into the larger cylindrical space (21b, 21c) of the valve (20) in view of regulating a supply pressure delivered to at least one lateral bearing element (4a, 4a', 4b, 4b'), as claimed in claim 8. Rather, Van Haag discloses a sag compensation roll having main bearing elements and lateral bearing elements wherein each bearing element is supplied with hydraulic fluid via a respective feeding line, which furnishes the hydraulic pressure for loading the elements against the inner surface of the shell. Each feeding line is further provided with respective pressure control reducers (regulators). The pressure control reducers operate independently from one another. Van Haag discloses that the regulators are arranged to deliver a constant volume flow of hydraulic fluid. Van Haag fails to teach or suggest a means for operation of the regulators for adjusting the hydrostatic pressure of the lateral bearing elements is dependent on the hydrostatic pressure of the main bearing elements, as clearly claimed in claim 8.

Arav also fails to disclose a regulator element (25), which is fitted in connection with a second end of the valve stem (22) as well as in connection with a feed line (P) for a hydraulic pressure fluid, and that the first slide (23) is subjectable to a hydrostatic control pressure consistent with a hydrostatic pressure acting on hydrostatic slide bearing

elements (5a, 5a', 5b, 5b') which work against the spring (26) and act on a roll shell (2) in a plane co-directional with a primary loading (F) for operating the valve stem (22) and the regulator element (25) in such a way- that the hydraulic pressure fluid has access from the feed line (P) into the larger cylindrical space (21b, 21c) of the valve (20) in view of regulating a supply pressure delivered to at least one lateral bearing element (4a, 4a', 4b, 4b'), as is claimed in claim 8. Arav, similar to Van Haag, discloses regulators, which are arranged to deliver a constant volume flow of hydraulic fluid. However, similar to Van Haag, Arav fails to teach or suggest a means for using the regulators to adjust the hydrostatic pressure of the lateral bearing elements that is dependent on the hydrostatic pressure of the main bearing elements, as clearly claimed in claim 8.

Since the combination of Van Haag and Arav does not disclose or suggest all the limitations of claim 8 it does not render obvious claim 8. Claims 9 to 13 depend either directly or indirectly from claim 8 and add further limitations thereto. Accordingly, the rejections under 35 U.S.C. § 103(a) of claim 8 and claims 9 to 13 should be withdrawn and claims 8 to 13 should be allowed.

In view of the foregoing, Applicant respectfully submits that all claims presented in this application patentably distinguish over the prior art and the cited combination of same. Accordingly, Applicant respectfully requests favorable consideration and that this application be passed to allowance.

Conclusion

In view of the foregoing, Applicant respectfully submits that all claims presented in this application are currently in condition for allowance. Accordingly, Applicant respectfully requests favorable consideration and that this application be passed to allowance.

Appl. No. 09/871,535
Amdt. Dated October 27, 2004
Reply to Office Action of June 30, 2004

Should any changes to the claims and/or specification be deemed necessary to place the application in condition for allowance, the Examiner is respectfully requested to contact the undersigned to discuss the same.

A petition for an extension of time for one month is filed herewith. Applicant's representative believes that this response is being filed in a timely manner. In the event that any extension and/or fee is required for the entry of this amendment the Commissioner is hereby authorized to charge said fee to Deposit Account No. 50-0518 in the name of Steinberg & Raskin, P.C.

An early and favorable action on the merits is earnestly solicited.

Respectfully submitted,
STEINBERG & RASKIN, P.C.

By: 

Carrie Anne Colby
Reg. No. 45,667

Steinberg & Raskin, P.C.
1140 Avenue of the Americas
New York, New York 10036
(212) 768-3800